

**WHAT IS CLAIMED IS :**

1. A symbol buffer memory device of a base station modem in a mobile communication system, in which the symbol data corresponding to at least one logical  
5 channel and coded in at least one encoding ratio is stored for transmission of the symbol data to a physical layer, the symbol buffer memory device comprising:

a buffer memory for storing the symbol data for the logical channel according to input sequences so that the symbol data between logical channels are stored in a continuous arrangement;

10 a start address table for storing address information according to the logical channels, each of the address information indicating a location of initial symbol data corresponding to each of the logical channels from among the symbol data stored in the buffer memory; and

a multiplexer for selectively outputting the address information stored in the  
15 start address table by an enable signal set for each of the logical channels.

2. The symbol buffer memory device as claimed in claim 1, wherein, when storage of symbols corresponding to a predetermined logical channel has been completed, an initial symbol of a logical channel is subsequently stored at a position of  
20 a word in the buffer memory next to the already-stored symbols.

3. The symbol buffer memory device as claimed in claim 1, wherein a selection signal input to the multiplexer is produced by reading an enable state of a corresponding channel by means of a pulse signal of each channel, the enable state of the  
25 corresponding channel being stored in the start address table.

4. The symbol buffer memory device as claimed in claim 1, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data  
30 for said one channel are stored is stored in the buffer memory.

5. The symbol buffer memory device as claimed in claim 1, wherein, when

symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel are stored is stored in the start address table.

- 5           6. A method of storing symbol data in a symbol buffer memory device of a base station modem in a mobile communication system, in which the symbol data corresponding to at least one logical channel and coded in at least one encoding ratio is stored in the symbol buffer memory device for transmission of the symbol data to a physical layer, the method comprising the steps of :
- 10           storing the symbol data for the logical channel according to input sequences in a buffer memory so that the symbol data between logical channels are stored in a continuous arrangement;
- storing address information according to the logical channels in a start address table, each of the address information indicating a location of initial symbol data
- 15           corresponding to each of the logical channels from among the symbol data stored in the buffer memory; and
- selectively outputting the address information stored in the start address table by an enable signal set for each of the logical channels.
- 20           7. The method as claimed in claim 6, wherein, when storage of symbols corresponding to a predetermined logical channel has been completed, an initial symbol of a logical channel is subsequently stored at a position of a word in the buffer memory next to the already-stored symbols.
- 25           8. The method as claimed in claim 6, wherein a selection signal input to the multiplexer is produced by reading an enable state of a corresponding channel by means of a pulse signal of each channel, the enable state of the corresponding channel being stored in the start address table.
- 30           9. The method as claimed in claim 6, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link information between the storage sectors in which the symbol data for said one channel

are stored is stored in the buffer memory.

10. The method as claimed in claim 6, wherein, when symbol data for one channel are divided and stored in at least two storage sectors of the buffer memory, link  
5 information between the storage sectors in which the symbol data for said one channel are stored is stored in the start address table.